PROJECT DESCRIPTION

THIS PORTION OF THE PROJECT INVOLVES THE INSTALLATION OF A TEMPORARY TRAFFIC SIGNAL FOR STAGES I-4 OF THE TRAFFIC CONTROL PLANS AND ULTIMATE SIGNAL AT THE INTERSECTION OF MD 193 (UNIVERSITY BOULEVARD) AND I-495 (CAPITAL BELTWAY) IN MONTGOMERY COUNTY, MARYLAND, MD 193 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

INTERSECTION OPERATION

TEMPORARY SIGNAL

GENERAL

THE INTERSECTION WILL OPERATE IN A NEMA THREE-PHASE, FULL-TRAFFIC-ACTUATED MODE WITH MD 193 APPROACHES OPERATING CONCURRENTLY AND THE I-495 APPROACH OPERATING ALONE.

ULTIMATE SIGNAL

THE INTERSECTION WILL OPERATE IN A NEMA THREE-PHASE, FULL-TRAFFIC-ACTUATED MODE WITH MD 193 APPROACHES OPERATING CONCURRENTLY AND THE I-495 APPROACH OPERATING ALONE. PEDESTRIAN INDICATIONS WILL BE PROVIDED ACROSS THE I-495 OFF RAMP.

TYPICAL MESSAGES FOR ACCESSIBLE PED SIGNALS - ULTIMATE SIGNAL

MD 193 (UNIVERSITY BOULEVARD) AND I-495 OFF RAMP - NORTH LEG

STREETS AT 90 DEGREES

WALK: RAPID TICK

WAIT: "WAIT TO CROSS I-495 RAMP AT UNIVERSITY, WAIT."

NOTE: MESSAGES FOR INTERSECTION CONFIGURATIONS, VARYING FROM THE ABOVE ARE TO BE APPROVED BY THE DIRECTOR, OFFICE OF TRAFFIC AND SAFETY.

CONTROLLER REQUIREMENTS

INSTALL A FULL-TRAFFIC-ACTUATED, EIGHT-PHASE CONTROLLER WITH TWO (2) FOUR-CHANNEL, SYSTEM PACKAGE, VIDEO INTERFACE EQUIPMENT (1-8 CAMERAS), UNINTERRUPTIBLE POWER SUPPLY, INTERSECTION MONITOR WITH BATTERY BACKUP FOR PHONE DROP AND ASSOCIATED HARNESSES HOUSED IN A NEMA SIZE "S" BASE MOUNTED CABINET.

PROJECT CONTACTS

THE CONTACT PERSONS FOR SHA ARE AS FOLLOWS:

MR. VENU NEMANI, MONTGOMERY PHONE: (301) 513-7404 ASSISTANT DISTRICT ENGINEER - TRAFFIC MR. KAMAL HAMUD MONTGOMERY COUNTY TMC PHONE: (240) 777-8761

MR. VERNON STINNETT ASSISTANT DISTRICT ENGINEER - MAINTENANCE PHONE: (301) 513-7304

MR. VICTOR GRAFTON DISTRICT UTILITY ENGINEER PHONE: (301) 513-7350

A. EQUIPMENT TO BE SUPPLIED BY THE SHA

CATEGORY CODES	QUANTITY	DESCRIPTION	
900000	1 EACH	EIGHT-PHASE, FULL-TRAFFIC-ACTUATED ASC III CONTROLLER WITH VIDEO INTERFACE EQUIPMENT: 1-8 CAMERAS	
900000	1 EACH	NEMA SIZE "S" BASE MOUNTED CABINET WITH INTERSECTION MONITOR	
900000	1 EACH	UPS BATTERY BACKUP SYSTEM	
900000	1 EACH	LAU PANEL	
973023	973023 69 S.F. SHEET ALUMINUM SIGNS TO CONSIST OF (POLE MOUNT):		
		- 1 EACH D-3(1) SIGN (VARIABLE \times 16 IN.) - MAST ARM MOUNT	
		- 2 EACH R3-3 SIGN (24 IN. x 24 IN.) - MAST ARM MOUNT	
		- 2 EACH R3-3 SIGN (24 IN. x 24 IN.) - SPAN MOUNT	
		- 2 EACH R3-5(L) SIGN (30 IN. x 36 IN.) - MAST ARM MOUNT	
		- 1 EACH R200-2 SIGN (30 IN. x 54 IN.) - MAST ARM MOUNT	
		- ! EACH R200-3 MOD. SIGN (30 IN. x 54 IN.) - MAST ARM MOUNT	
		 2 EACH R10-3(1) SIGN (9 IN. x 15 IN.) TO READ "PUSHBUTTON TO CROSS I-495 RAMP" 	

EQUIPMENT LIST "A"

EQUIPMENT LIST "C"

C. EQUIPMENT TO BE REMOVED AND RETURNED TO SHA

1. EXISTING VIDEO DETECTION CAMERAS AND INTERFACE EQUIPMENT SHALL BE RETURNED TO SHA.

2. ALL OTHER REMOVED SIGNAL MATERIALS SHALL BECOME PROPERTY OF THE CONTRACTOR

STATE OF MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION OFFICE OF TRAFFIC & SAFETY

MD 193 (UNIVERSITY BOULEVARD) AND I-495 (CAPITAL BELTWAY) SILVER SPRING, MARYLAND

TRAFFIC ENGINEERING DESIGN DIVISION

GENERAL	INFORMATION	SHEET
GLIALIVAL		<i>-</i>

SCALE NONE ADVERTISED DATE OCTOBER 2012 CONTRACT NO. MO5825180

DESIGNED BY S. BLOSS COUNTY MONTGOMERY DRAWN BY S. BLOSS LOGMILE _ CHECKED BY N. LEARY

TS NO. 4521B DRAWING TSP-07 OF 07

F.A.P. NO. SEE TITLE SHEET

SHEET NO. 97 OF 184

WR84 WHITMAN, REQUARDT

EQUIPMENT LIST "B"

TEST PIT EXCAVATION

DESCRIPTION

THERMOPLASTIC PAVEMENT MARKINGS

CONCRETE FOR SIGNAL FOUNDATION

WOOD SIGN SUPPORTS 4"X6"

INSTALL GROUND MOUNTED SIGN

10 FOOT BREAKAWAY PEDESTAL POLE

RELOCATE EXISTING SIGNAL HEAD

STEEL POLE WITH TWIN 50 FOOT MAST ARM

INSTALL OVERHEAD SIGN

14" × 32' STRAIN POLE

24 INCH HEAT APPLIED WHITE PERMANENT PREFORMED

NO. 6 AWG STRANDED BARE COPPER GROUND WIRE

4 INCH SCHEDULE 80 RIGID PVC CONDUIT-BORED

2 INCH SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED

3 INCH SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED

4 INCH SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED

STEEL POLE WITH TWIN 50 FOOT AND 60 FOOT MAST ARMS

GROUND ROD - 3/4 INCH DIAMETER X 10 FOOT LENGTH

12 IN. LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION

ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)

ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)

ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)

ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 AWG)

INSTALL CONTROLLER AND CABINET - BASE MOUNT

AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON STATION

16 INCH COUNTDOWN PEDESTRIAN SIGNAL HEAD

15 FOOT LIGHTING ARM ON SIGNAL STRUCTURE

STEEL SPAN WIRE - 3/8 INCH DIAMETER

2-WIRE CENTRAL CONTROL UNIT

280 LED LAMP AND LUMINAIRE

VIDEO DETECTION CAMERA AND CABLE

CUT, CLEAN, GALVANIZE AND CAP TRAFFIC SIGNAL STRUCTURE

REMOVE AND DISPOSE OF EXISTING MATERIAL AND EQUIPMENT

FURNISH AND INSTALL ELECTRICAL HANDHOLE

12 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

QUANTITY

6 C.Y.

595 L.F.

450 L.F.

30 C.Y.

38 L.F.

485 L.F.

175 L.F.

50 L.F.

30 L.F.

100 L.F.

5 EACH

24 S.F.

85 S.F.

2 EACH

3 EACH

1 EACH

1 EACH

6 EACH

12 EACH

45 EACH

1 EACH

210 L.F.

860 L.F.

1855 L.F.

490 L.F.

2 EACH

375 L.F.

1 EACH

1 EACH

2 EACH

2 EACH

1 EACH

5 EACH

2 EACH

CODES

203030

585621

585625

801004

801106

802501

805118

805125

805135

805140

811001

813014

813015

818004

818009

818021

818050

837001

860265

860284

860292

861105

861107

861108

861116

866103

869102

871202

800000

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